

Date: Wed, 15 Sep 93 04:30:27 PDT  
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>  
Errors-To: Ham-Equip-Errors@UCSD.Edu  
Reply-To: Ham-Equip@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Equip Digest V93 #42  
To: Ham-Equip

Ham-Equip Digest                      Wed, 15 Sep 93                      Volume 93 : Issue    42

Today's Topics:

                    Best 2-meter HT  
                    Frequency Counter Manuals Needed  
                    HF RX Recommendations? (NRD353/R8E/IC-72/RS5000)  
                    IC229H low audio problem  
Icom IC-2410 (or IC3230) out of band xmit? D14 question  
                    ICW21AT out of band sensitivity  
                    Inst. book for Clegg Zeus needed  
                    Need info on ICOM 2GAT (2 msgs)  
                    Shuffling band modules in TM741/742  
                    Spare parts to an old oscilloscope

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>  
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 15 Sep 93 02:24:18 GMT  
From: ogicse!uwm.edu!math.ohio-state.edu!sol.ctr.columbia.edu!news.mtu.edu!  
zaphod.mg.mtu.edu!drew@network.ucsd.edu  
Subject: Best 2-meter HT  
To: ham-equip@ucsd.edu

Greetings all! I'm getting ready to buy a 2-meter set,  
either mobile or hand-held, and was looking for recommendations.  
What features, brands, and models should I look for? Are there  
any problem areas to look for if I buy used? What are good places  
to buy from? What kind of power and features are 'standard' things?

Thanks a bunch!

Andrew Benson (drew@mtu.edu)

-----  
Date: 14 Sep 1993 12:57:13 GMT  
From: boulder!tali.hsc.colorado.edu!wom.HSC.Colorado.EDU!debert@uunet.uu.net  
Subject: Frequency Counter Manuals Needed  
To: ham-equip@ucsd.edu

I have a friend that has two frequency counters but no manuals for either one. Both are made by Eldorado Electronics Inc. One is a model 990 microwave frequency counter and the other is a model 1615 frequency counter. If you can help please E-Mail

dne@data.hsc.colorado.edu

Thanks and 73

Dave K7RH

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Date: Mon, 13 Sep 1993 19:54:14 GMT  
From: psinntp!witch!usenews!dmarcus@uunet.uu.net  
Subject: HF RX Recommendations? (NRD353/R8E/IC-72/RS5000)  
To: ham-equip@ucsd.edu

In article <MIKEC.93Sep8135623@cantor.praxis.co.uk>, Mike Chace (mikec@praxis.co.uk) writes:

>Hi Folks,

>

>I wonder if you could help me? I've been using a Lowe HF150 for some  
>time now and I still love it - but - I'm starting to miss not being  
>able to scan and to have more memories and scan those too.

>

>I'm considering part exchange for either of:

>

> Drake R8E

> Kenwood RS5000

> Icom IC-R72

> JRC NRD535

Mike:

I have a Kenwood R5000, which I bought used, and am very happy with it. It's a bit more difficult to tune than the Icom R71A I used to own,

but the audio is splendid and it's a nice, quiet radio with many wonderful features.

If I had US\$1,000, though, I think I'd go with the Drake, because of the ECSS-s and the several good audio filters it has. In the U.S., it has a \$600 price advantage over the NRD535.

Just one man's humble opinion. I would say that, except for the IC-R72, you probably wouldn't go wrong with any of the receivers you're considering.

Happy hunting.

David

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Date: 14 Sep 93 14:22:13 GMT  
From: psinntp!arrl.org@uunet.uu.net  
Subject: IC229H low audio problem  
To: ham-equip@ucsd.edu

In rec.radio.amateur.misc, ker@mtgzfs3.att.com (131P2[sfm]-  
k.e.roser(MT4084)1047MT) writes:

>In article <1993Sep2.210417.4491@njitgw.njit.edu> fab4536@hertz.njit.edu (Freddy  
A. Balady) writes:

>>I seem to have a low audio problem with my Icom 229h. If I swallow  
>>the microphone, the audio does get better. But at a normal distance  
>>of 1 or 2 inches, it is way too low. Has anyone else experienced this  
>>problem? If so, what was the remedy?

>This seems to be a common problem with ICOM radios. The answer is to  
>open up the radio and turn up the mic gain/deviation. I did this on my 2410  
>and the audio reports went from "low" to "great."

One caveat: If it's a rig you also use/plan to use for running packet,  
check the deviation when it's spitting out packets. One of the most common  
problems with effective packet communications is having too much deviation.  
On 2 meters (1200 bauds), 5.0 kHz is the MAX! 3.0 is very good, if your  
signal is adequate. Generally, 3.5-4.0 kHz is ideal for most stations. If  
you crank your rig for mike audio, just check it if you run it on packet.  
And document your adjustments in case you forget/sell the rig!

GL...

CUL es 73 de BB

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*****
Brian Battles, WS10      I Tel      203-666-1541, ext 222 I  "Radio amateurs
QST Features Editor     I Fax      203-665-7531          I  do it with high
ARRL HQ                 I Internet bbattles@arrl.org      I  frequency"
Newington, CT USA      I Amprnet  ws1o@ws1o.ampr.org [44.88.0.87]
*****

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Date: 14 Sep 93 18:07:16 GMT  
From: att-out!cbnewsh!cbnewse!parnass@RUTGERS.EDU  
Subject: Icom IC-2410 (or IC3230) out of band xmit? D14 question  
To: ham-equip@ucsd.edu

I have an Icom IC-2410H dual band transceiver and  
have clipped 3 diodes to enable out of band receive.

Unlike the IC-228H 2m xcvr, the monitor switch does  
not let one listen on the inputs of commercial/police  
repeaters on the IC-2410 when the splits are programmed  
correctly.

I'm hoping that by enabling out of band transmit, the  
monitor function will be restored. Here are my questions:

- 1) how can one enable out of band xmit on the IC-2410H?
- 2) Diode D14 is shown as being present only on the USA version  
of the IC-2410H but one end is not connected to anything.  
It looks like there is a place for a jumper to connect D14.  
Has anyone tried adding this jumper? What effect does it have?

I suspect that the IC3230 and IC2410 are similar enough so  
that info on the IC3230 might help, too.

Thanks.

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                        AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

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Date: Tue, 14 Sep 1993 16:19:46 GMT  
From: news.cerf.net!pagesat!spssig.spss.com!feenix.metronet.com!  
marcbg@network.ucsd.edu  
Subject: ICW21AT out of band sensitivity  
To: ham-equip@ucsd.edu

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Date: Mon, 13 Sep 1993 23:32:13 GMT  
From: destroyer!vela.acs.oakland.edu!w8hd!kimc@uunet.uu.net  
Subject: Inst. book for Clegg Zeus needed  
To: ham-equip@ucsd.edu

The title says it all...  
After some years of searching, a Clegg Zeus was found last weekend  
but, alas, the instruction book did not manage to follow it  
after all these years.

This unit is an AM transmitter for 6 & 2 meters c. 1965.

If you have any info this gear I'd like to hear from you.

regards  
kim, w8hd  
--  
kimc@w8hd.org

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Date: Tue, 14 Sep 1993 04:47:19 GMT  
From: library.ucla.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!  
newsrelay.iastate.edu!news.iastate.edu!pv6804.vincent.iastate.edu!  
jcgreen@network.ucsd.edu  
Subject: Need info on ICOM 2GAT  
To: ham-equip@ucsd.edu

I saw an ICOM 2GAT for sale for what seemed like a good price.. Can anyone  
give me some info about it? What would be considered a reasonable price?  
What can it do? I don't have much experience with this equipment, so any  
info would be appreciated. Thanks..

--  
\* Jon Green                   \* "Drums, guitars, and       \* Friley 5646 Lorch-Russell \*  
\* jcgreen@iastate.edu       \* death. They finally got \* Ames, Iowa 50012-0001       \*  
\* Jon2@irc                   \* it right." - Butt-Head \* Phone (515) 296-0648       \*

-----  
Date: 14 Sep 93 12:58:15 GMT  
From: att-out!cbnewsh!cbnewse!parnass@RUTGERS.EDU  
Subject: Need info on ICOM 2GAT

To: ham-equip@ucsd.edu

jcgreen@iastate.edu (Jon Green) said:

- > I saw an ICOM 2GAT for sale for what seemed like a good price.
- > Can anyone give me some info about it? ....

Here's a review I wrote a few years ago. My IC-2GAT is still working very well.

#### REVIEW: THE ICOM IC-2GAT 2M WALKIE TALKIE

by Bob Parnass, AJ9S

The introduction of a new walkie talkie into the ham marketplace is welcome news for many hams, but not for owners of the previous model if it renders their accessories obsolete. The Kenwood line is a good example. Some hams noticed back when Kenwood changed the pin spacing on the earphone and microphone jacks, which meant TR-2500 owners couldn't use their old speaker microphones with the newer TR-2600. Then, the ST-2 rapid charger/base power supply was made obsolete when Kenwood replaced the TR-2600 walkie talkie with the TH-215.

In contrast, Icom chargers, battery packs, and remote speaker microphones have been used, sold, and swapped at hamfests and club meetings for years now. An Icom BP-3 battery pack will work with today's Icom dual bander as it did with it's great grandfather, the IC-2A, almost a decade ago.

#### Preliminaries

The IC-2GAT is the worthy successor to the IC-02AT. It comes equipped with a CTCSS encoder, and sports 20 channels which can memorize 20 different frequencies, transmit offsets, and CTCSS codes.

The keypad on the front is for Touch Tone use only, and not frequency entry. The IC-2GAT lacks a channel selector or tuning knob, but uses a momentary rocker switch instead. Keeping it depressed autoincrements or decrements the frequency or channel, depending on whether the radio is in VFO or MEMORY mode. There are other rocker switches that set

the MHz and 100s of kHz digits, which makes it easier to change frequency than with the FT-23R.

The IC-2GAT receiver audio output is good for a walkie talkie. It is not as loud as the Kenwood TR-2600A, but certainly much better than the weak audio from the FT-23R. You can increase the volume to a healthy level before the IC-2GAT distorts.

### Scanning and Searching

Like to scan? The IC-2GAT has memory scan, and one can easily lock out channels from the scan while they remain accessible in manual mode. The older IC-02AT had no lock out provision. The Icom lockout is better than the lockout in the Yaesu FT-23R, which employs a cumbersome scheme to "hide" channels.

One can search up and down the band in the VFO mode. Unlike the premium IC-275H 2 meter multimode transceiver, or like most scanners, the IC-2GAT lacks programmable search limits and instead uses 138 and 174 MHz as fixed limits. Scanning and searching with the IC-2GAT is fast for a 2 meter radio, and the only disadvantage is that scanning or searching resumes after a timer expires rather than waiting for the end of a transmission. The timer lasts about 15 seconds, so it's not quite ruthless preemption.

### Physical

The IC-2GAT is no wimp -- it "feels" rugged, and was delivered without cracks in the case like the Kenwood TR-2600A. Its transmitter is rated for up to 7 watts output, so the back of the radio is made of cast metal and acts as a heatsink. Both the 2 meter IC-2GAT and its marine band cousin, the IC-M11, brag of "splash resistant" construction. Jacks and other openings in the case are plugged with rubber gasketing. Splash resistant should not be construed as waterproof or submersible. Although my Yaesu FT-23R was similarly advertised, I still can't determine how hair and dust found their way inside the Yaesu case!

### Extended Frequency Coverage

Like its other Icom 2 meter cousins, the IC-2GAT receives

between 138 and 174 MHz, a wider range than Kenwood and Yaesu competitors. The extra coverage above 164 MHz allows listening to federal law enforcement stations, press, and other services.

### Batteries

The IC-2GAT is furnished with a BP-70 slide on battery, which supplies the radio with 13.2 volts, enough for at least 7 watts output on high power. With a limited capacity of 270 mAh, the BP-70 won't last long before needing a recharge. It also contains a regulator circuit, an LED charge indicator, and 2 rubber gasketed charging jacks. The BP-70 can be recharged in 9 hours by the included wall power supply, or directly from a 13 volt auto power supply.

Although the IC-2GAT runs about 1 watt output in low power with just about any compatible battery pack, the high power output varies depending on battery voltage.

Icom sells slide on battery packs of various voltages and capacities which can power the IC-2GAT (and predecessor models). Aftermarket NiCd battery vendors, like Periphex, W & W (Batteries 'R Us), JaBro, and E. H. Yost (Mr. Nicad), supply replacement cells as well as special, high capacity battery packs for Icom gear. One can spend about \$65 and buy a 1200 mAh pack from W & W, but it makes the radio quite large.

I bought the BP-4 slide on battery case, which can hold 6 AA alkaline (total 9 V) or NiCd cells (total 7.2 V), and is smaller than the BP-70 supplied. A BP-4 case fitted with NiCds affords between 2 and 3 watts in high power, but has about double the capacity of the BP-70.

Be warned -- not all AA NiCd batteries are the same! Radio Shack AA NiCds are a meager 450 mAh, but my Sanyo cells are 550 mAh, and Periphex sells 700 mAh AA batteries!

The BP-4 has no charging jacks but can be recharged using the optional Icom base charger. I fabricated a charging stand from scrap wood, and use a constant current power supply for my charging.

Like its competitors, the IC-2GAT has a battery saver feature. In manual mode, if the radio has been quiet and the pushbuttons have been idle for 30 seconds, the CPU



cycles most of the other stages on and off. Receiver current consumption drops markedly in this mode. Owners wishing to use the IC-2GAT for packet can disable the battery save feature, to ensure they don't miss the first few bits of a transmission.

### Overall

I like the IC-2GAT's performance and physique, and it's good having a wide variety of battery options from which to choose.

Icom IC-2GAT Transmitter Power vs. Supply Voltage (high power setting)			
Supply Voltage	Supply Current (A)	Transmitter Output (W)	
5	.7	1	*****
6	.9	1.6	*****
7	1.0	2.2	*****
8	1.2	2.9	*****
9	1.5	4.0	*****
10	1.5	5.0	*****
11	1.6	6.0	*****
12	1.7	6.5	*****
13	1.8	7.0	*****

### Notes:

1. Measurements taken using Bird 43 wattmeter, Bird 8085 Termaline load, and B & K Precision 1601 regulated power supply.
2. In the low power setting, the IC-2GAT delivered 1 watt output for all supply voltages between 5 and 13 volts.

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 Date: Tue, 14 Sep 1993 19:25:42 GMT

From: netcomsv!netcom.com!netcom!faunt@decwrl.dec.com  
Subject: Shuffling band modules in TM741/742  
To: ham-equip@ucsd.edu

I've got a TM741 for the shack, which has the 1.2GHz module added, but I would like the display to match the 942 in the truck, so I'd like to shuffle the band modules so that it shows 2m, 70cm, 23 cm in that order. I know there's some conderation about power to the control module, but I'd like some information, preferably from someone who's done it, about any gotcha's found, or maybe there aren't any.  
thanx, and 73, doug

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Date: Thu, 9 Sep 1993 12:57:59 GMT  
From: sunic!news.lth.se!news.lu.se!buster.hik.se!hikteknik!christer@uunet.uu.net  
Subject: Spare parts to an old oscilloscope  
To: ham-equip@ucsd.edu

SpaSpare parts to oscilloscope DUMONT 1100P  
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I have a rather old oscilloscope from 1977, that has been functioning quite well for all these years but now suddenly has thrown in the towel. Is there anybody out there who knows if there is still a chance to buy some spare parts to it. It is made by DUMONT OSCILLOSCOPE LABORATORIES INC  
40 Fairfield Place, West Caldwell, N.J. 07006

I did try out reaching them by phone, but the company was not there anymore. When they left and where to, I don't know. Can anybody help me with information ???

Email:Christer.Lundberg@te.hik.se  
( Christer Lundberg, Kalmar, Sweden )

-----  
Date: (null)  
From: (null)  
Any comments? Ideas? Let's find out more about this radio!

--  
Marc B. Grant, N5MEI | marcbg@metronet.com | 214/231-3998 (voice)  
P.O Box 850472 | marcbg@esy.com | 214/231-0025 (fax)  
Richardson, TX 75085 |

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End of Ham-Equip Digest V93 #42  
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